

**AMENDMENT TO THE CLAIMS**

1. (Canceled)
2. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein the lids of the mixing chamber and the precipitation chamber are located in one plane.
3. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein the lids of the mixing chamber and the precipitation chamber are connected in a form of an angle-shape.
4. (Currently Amended) The system of claim 3 wherein ~~corps a shape~~ a shape formed by the mixing chamber and the precipitation chamber in a plane is in a form of one of a rectangle with rounded corners, a circle, an ellipse, and a figure-eight shape.
5. (Previously Presented) The system of claim 3 wherein the bottoms of the chambers for the ferreed sorbent mixing and precipitation are hard-fixed on the interchamber partition.

Serial No.: 10/576,039

6. (Canceled)

7. (Previously Presented) The system of claim 3 wherein the bottoms of the chambers for the ferreed sorbent mixing and precipitation are fixed on the interchamber partition are rotatable in a lid rotation plane.

8. (Previously Presented) The system of Claim 3 wherein capacities of inner cavities of the chambers for the ferreed sorbent mixing and precipitation are in a proportion of one of 1:1, 1:(0.1-0.9), and (0.1-0.9):1 and capacities of inner cavities of the mixing chamber and the vessel are in a second proportion of 1:(0.1-0.9).

9. (Currently Amended) The system of claim ~~[[1]]~~ 38, wherein the vessel for ferreed sorbent is installed inside the mixing chamber at a distance of at least (1-100)d from the side wall of the above chamber and at least (10-100)d from the interchamber partition, where d is an inner diameter of the channel connecting the inlet socket with the inner cavity of the mixing chamber.

Serial No.: 10/576,039

10. (Previously Presented) The system of claim 9 wherein the channel from the inlet socket is input into the mixing chamber through one of the chamber bottom and the lid.

11. (Previously Presented) The system of claim 10 wherein the channel from the inlet socket is input into the mixing chamber at an angle of  $(10-80)^{\circ}$  to a bottom plane and, respectively, to the chamber lid and a vertical line.

12. (Previously Presented) The system of claim 9 wherein the channel from the inlet socket is input into the vessel through the vessel lid, and the output channel going from the vessel to the mixing chamber is installed in the vessel and the mixing chamber side walls at the distance of  $(0.5-50)d$  from the mixing chamber bottom, where  $d$  is the channel diameter.

13. (Previously Presented) The system of claim 9 wherein the channel between the chambers for the ferreed sorbent mixing and precipitation is installed in the interchamber partition at a distance of  $(0.5-50)d$  from the chambers bottoms, where  $d$  is a channel diameter.

Serial No.: 10/576,039

14. (Previously Presented) The system of claim 9 wherein the channel between the chambers for the ferreed sorbent mixing and precipitation is installed in the interchamber partition at the angle of  $(10-60)^\circ$  to the bottom of precipitation chamber and the interchamber partition.

15. (Previously Presented) The system of claim 9 wherein the output channel from the precipitation chamber is installed in one of the chamber lid and an upper part of the chamber side wall at a distance of  $(0.5-50)d$  from the lid, where  $d$  is a channel diameter.

16. (Currently Amended) The system of claim [[1]] 38 wherein magnets are installed at least one of inside the precipitation chamber, outside of the above chamber, and both inside and outside the precipitation chamber, and ~~they~~ are fixed on the bottom of the above chamber.

17-20. (Canceled)

21. (Currently Amended) The system of claim [[20]] 9, wherein diameters of input channels going into the mixing chamber and the vessel are chosen in a proportion of  $d/d_1 = V/V_1$ , where  $d$  is an inner diameter of the

Serial No.: 10/576,039

channel going into the mixing chamber,  $d_1$  is an inner diameter of the channel going into the vessel,  $V$  is a mixing chamber capacity, and  $V_1$  is a vessel capacity.

22. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein the walls of the vessel, the mixing chamber and the precipitation chamber and the partition between the above chambers, as well as the lid and the bottom are made of polyurethane.

23. (Previously Presented) The system according to claim 22, wherein the corrugation in the vessel and the chambers for the ferreed sorbent mixing and precipitation is made at (0.5-0.95) of a height of a respective wall.

24. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein ~~corps~~ a shape formed by the mixing chamber and the precipitation chamber in a plane is in a form of one of a rectangle with rounded corners, a circle, an ellipse, and a figure-eight shape.

25. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein the bottoms of the chambers for the ferreed sorbent mixing and precipitation are hard-fixed on the interchamber partition.

26. (Canceled)

27. (Currently Amended) The system of claim [[1]] 38 wherein the bottoms of the chambers for the ferreed sorbent mixing and precipitation are fixed on the interchamber partition and are rotatable in a lid rotation plane.

28. (Currently Amended) The system of claim [[1]] 38 wherein capacities of inner cavities of the chambers for the ferreed sorbent mixing and precipitation are in a proportion of one of 1:1, 1:(0.1-0.9), and (0.1-0.9):1 and capacities of inner cavities of the mixing chamber and the vessel are in a second proportion of 1:(0.1-0.9).

29. (Currently Amended) The system of claim [[1]] 38 wherein the channel from the inlet socket is input into the mixing chamber through one of the chamber bottom and the lid.

Serial No.: 10/576,039

30. (Previously Presented) The system of claim 29 wherein the channel from the inlet socket is input into the mixing chamber at an angle of  $(10-80)^\circ$  to a bottom plane and, respectively, to the chamber lid and a vertical line.

31. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein the channel from the inlet socket is input into the vessel through the vessel lid, and the output channel going from the vessel to the mixing chamber is installed in the vessel and the mixing chamber side walls at the distance of  $(0.5-50)d$  from the mixing chamber bottom, where  $d$  is the channel diameter.

32. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein the channel between the chambers for the ferreed sorbent mixing and precipitation is installed in the interchamber partition at a distance of  $(0.5-50)d$  from the chambers bottoms, where  $d$  is a channel diameter.

33. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein the channel between the chambers for the ferreed sorbent mixing and precipitation is installed in the interchamber partition at the angle of  $(10-60)^\circ$  to the bottom of precipitation chamber and the interchamber partition.

34. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein the output channel from the precipitation chamber is installed in one of the chamber lid and an upper part of the chamber side wall at a distance of (0.5-50)d from the lid, where d is a channel diameter.

35. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein a spot one of above the mixing chamber corrugated side wall and above the precipitation chamber corrugated side wall is ~~[[the]]~~ a driving gear application spot.

36. (Currently Amended) The system of claim ~~[[1]]~~ 38, wherein diameters of input channels going into the mixing chamber and the vessel are chosen in a proportion of  $d/d_1 = V/V_1$ , where d is an inner diameter of the channel going into the mixing chamber,  $d_1$  is an inner diameter of the channel going into the vessel, V is a mixing chamber capacity, and  $V_1$  is a vessel capacity.

37. (Currently Amended) The system of claim ~~[[1]]~~ 38 wherein the corrugation in the vessel and the chambers for the ferreed sorbent mixing and precipitation is made at (0.5-0.95) of a height of a respective wall.



Serial No.: 10/576,039

38. (New) A system including hermetic parts connected via channels with valves installed in the channels for providing flow of a biological fluid through the system from an inlet socket to an outlet socket, the system comprising:

a vessel for a ferreed sorbent,

a mixing chamber for mixing the ferreed sorbent with the biological fluid;

a precipitation chamber for precipitation of the ferreed sorbent out of the biological fluid;

magnets installed on a bottom of the precipitation chamber;

a filtering device connected with an outlet channel of the precipitation chamber;

the filtering device, the outlet socket, the mixing chamber, the precipitation chamber and the vessel for the ferreed sorbent having variable capacities;

the mixing chamber and the precipitation chamber formed as vessels having one of hard-jointed lids or a mutual lid, a mutual wall fixed to bottoms of the chambers and forming an interchamber partition, inner cavities of the chambers connected through a channel in the interchamber partition, and other side walls of the chambers having corrugations forming corresponding silphons,

Serial No.: 10/576,039

wherein the chamber lids are fixed on the interchamber partition via hinges with a possibility to rotate around a hinge axis;

wherein the vessel for the ferreed sorbent is installed inside the mixing chamber and an inner cavity of the vessel connected with an inner cavity of the mixing chamber, and the vessel is formed as a cylinder with a silphon-type corrugated side wall surface with a first butt-end of the cylinder fixed on the bottom of the mixing chamber and a second butt-end of the cylinder having a lid fixed on the mixing chamber lid; and

the system inlet socket simultaneously connected to the inner cavity of each of the mixing chamber and the vessel for the ferreed sorbent.